

In the Claims:

1. (Previously Presented) A method for removal of a selected portion of a therapeutic coating from a coated generally tubular medical device, comprising the steps of:

determining an amount of therapeutic coating on the medical device, wherein the medical device has a first end and has a lattice structure formed from a plurality of coated struts;

positioning the medical device on a holder, wherein the holder includes a retaining bar;

engaging the lattice structure of struts at the first end of the medical device with the retaining bar to maintain the medical device at a predetermined position relative to the holder;

identifying a location of at least one strut of the engaged medical device relative to a coating removal laser;

rotating the medical device relative to the coating removal laser; and

ablating the selected portion of the coating from the rotating medical device with the laser;

wherein the selected portion of the coating to be removed is a portion of the coating sufficient to reduce the amount of coating on the medical device to a target amount of coating.

2. (Original) The selective coating removal method of claim 1, wherein the laser is controlled by a laser controller to distribute light energy over the selected portion, and

an amount of light energy distributed by the laser is sufficient to ablate the selected portion of the coating from the medical device.

3. (Original) The selective coating removal method of claim 2, wherein the rotation of the medical device relative to the laser is controlled by a motion controller, and

the laser controller cooperates with the motion controller to control the laser to distribute light energy on the selected portion of the coating.

4. (Original) The selective coating removal method of claim 3, wherein the laser controller controls the laser in accordance with a predetermined pattern as the medical device is rotated relative to the laser.

5. (Original) The selective coating removal method of claim 4, wherein the selected portion comprises a plurality of coating sections on the medical device.

6. (Original) The selective coating removal method of claim 5, wherein the selected portion comprises at least one circular coating section.

7. (Original) The selective coating removal method of claim 4, wherein the medical device is a stent.

8. (Previously Presented) A method for removal of a selected portion of a therapeutic coating from a coated stent, comprising the steps of:

providing a stent coated with a therapeutic agent, wherein the stent includes a plurality of coated stent struts;

providing a coating removal laser system, wherein the laser system comprises a laser and a laser controller to distribute light energy over a selected portion of a therapeutic coating of a coated stent;

providing a pattern recognition system;

identifying stent strut position relative to the laser with the pattern recognition system;

positioning at least one stent strut relative to the laser based on output from the pattern recognition system;

rotating the stent relative to the laser; and

ablating the selected portion of the coating from the rotating stent with the laser.

9. (Canceled).

10. (Previously Presented) The selective coating removal method of claim 1, wherein the target amount of coating is a target weight of coating, and

the step of determining the amount of therapeutic coating on the medical device comprises subtracting a weight of the medical device from the weight of the coated medical device.

11. (Original) The selective coating removal method of claim 10, wherein the selected portion is at least one circular coating section.

12. (Original) The selective coating removal method of claim 11, wherein the medical device is a stent.

13. (Previously Presented) A selective coating removal apparatus for removal of a selected portion of a coating from a coated medical device, comprising:

a pattern recognition system;
a medical device rotator; and
a laser,

wherein

the pattern recognition system identifies the positioning of at least one strut of a medical device relative to the laser, determines whether the strut is in a desired position relative to the laser, and provides output to correct positioning of the strut relative to the laser, and

the laser ablates the selected portion of the coating from the medical device as the medical device is rotated by the rotator based on output from the pattern recognition system.

14. (Previously Presented) The selective coating removal apparatus of claim 13, further comprising:

a laser controller, wherein

the laser controller causes the laser to distribute light energy over the selected portion,
and

an amount of light energy distributed by the laser is sufficient to ablate the selected portion of the coating from the medical device.

15. (Original) The selective coating removal apparatus of claim 14, further comprising:
a motion controller, wherein
the motion controller controls the rotation of the medical device relative to the laser, and
the laser controller cooperates with the motion controller to control the laser to distribute light energy on the selected portion of the coating.

16. (Original) The selective coating removal apparatus of claim 15, wherein the selected portion comprises a plurality of coating sections on the medical device.

17. (Original) The selective coating removal method of claim 16, wherein the selected portion comprises at least one circular coating section.

18. (Original) The selective coating removal apparatus of claim 15, wherein the medical device is a stent.

19. (Original) The selective coating removal apparatus of claim 15, wherein the selected portion of the coating to be removed is a portion of the coating sufficient to reduce the amount of coating on the medical device to a target amount of coating.

20. (Original) The selective coating removal apparatus of claim 19, wherein
the target amount of coating is a target weight of coating.

21. (Original) The selective coating removal method of claim 20, wherein the selected portion is at least one circular coating section.

22. (Original) The selective coating removal method of claim 21, wherein the medical device is a stent.

23. (Previously Presented) The selective coating removal method of claim 8, wherein the rotation of the stent relative to the laser is controlled by a motion controller, and the laser controller cooperates with the motion controller to control the laser to distribute light energy on the selected portion of the coating.

24. (Previously Presented) The selective coating removal method of claim 23, wherein the step of positioning at least one stent strut relative to the laser based on output from the pattern recognition system comprises correcting at least one stent strut position relative to the laser to improve ablation accuracy.

25. (Previously Presented) The selective coating removal method of claim 24, wherein the step of correcting at least one stent strut position relative to the laser comprises providing output to the laser controller to alter the distribution of light energy.

26. (Previously Presented) The selective coating removal method of claim 24, wherein the step of correcting at least one stent strut position relative to the laser comprises providing output to the motion controller to alter the rotation of the stent.